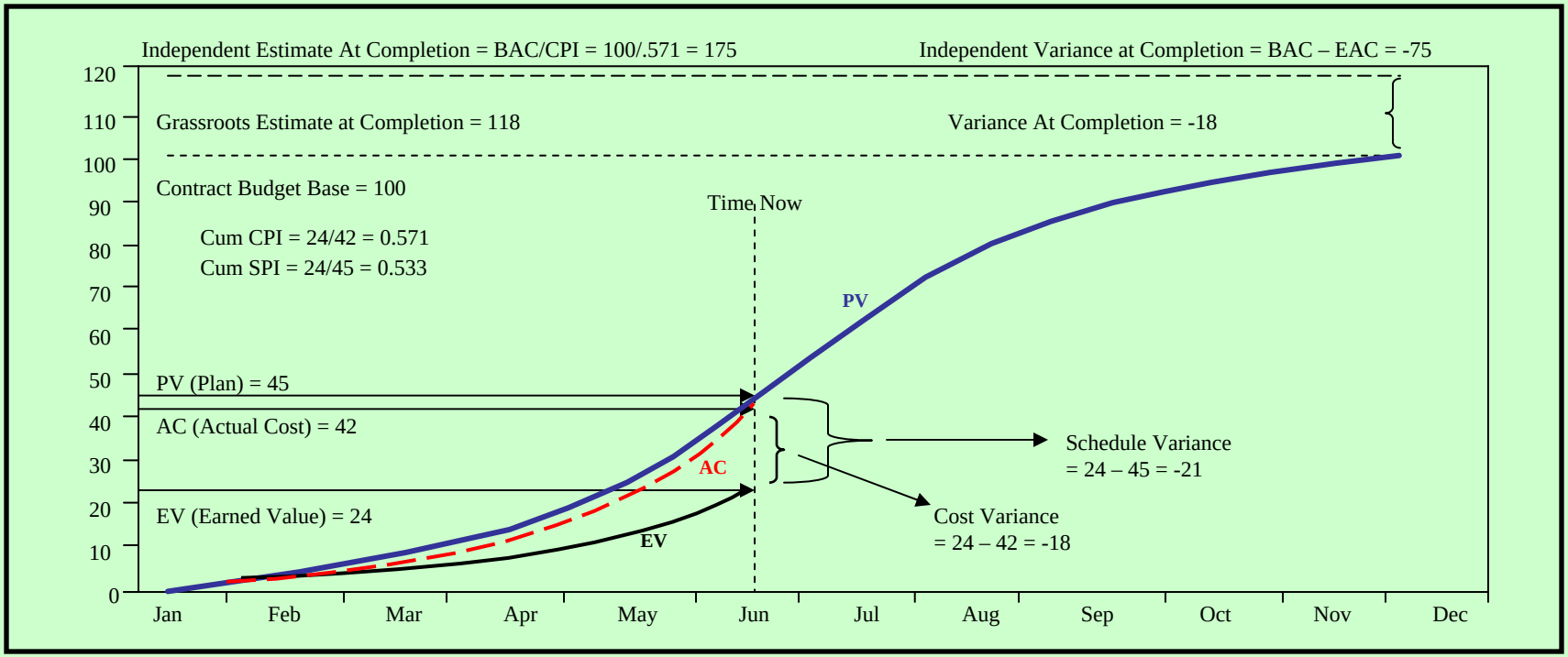
Earned Value Reference Guide



Earned Value Components

Planned Value (PV):	**The authorized budget assigned to the planned scheduled work to be accomplished for an activity.**
Actual Cost (AC):	**Total costs incurred accomplishing work performed during a given time period for an activity.**
Earned Value (EV):	**The authorized budget for the physical work accomplished.**
Estimate At Completion (EAC):	**The expected total cost of an activity when the scope of work will be completed.**
Budget At Completion (BAC):	**The total planned value for the project.**
Estimate To Complete (ETC):	**The expected cost needed to complete all the remaining work for an activity.**

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Earned Value Reference Guide

Cost Variance (CV): = EV-AC

Schedule Variance (SV): = EV-PV

Variance at Completion (VAC): = BAC – EAC

Cost Variance Percentage (CV%): = $\frac{CV}{EV}$

Schedule Variance Percentage (SV%): = $\frac{SV}{PV}$

Cost Performance Index (CPI): = $\frac{EV}{AC}$

Schedule Performance Index (SPI): = $\frac{EV}{PV}$

To Complete Performance Index (TCPI): = $\frac{BAC - EV}{EAC - AC}$

Percent Complete: = $\frac{EV}{BAC}$

Percent Spent: = $\frac{AC}{EAC \text{ (or BAC)}}$

Planned Percent Complete: = $\frac{PV}{BAC}$

Grassroots/Calculated EAC: = AC + ETC

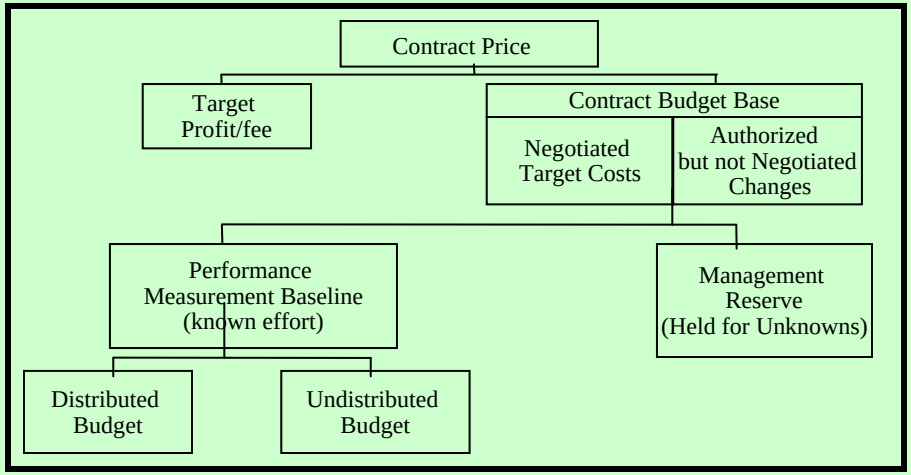
Independent EAC #1: = $\frac{BAC}{CPI}$

Independent EAC #2: = AC + $\frac{BAC - EV}{CPI \times SPI}$
(Worst Case)

Comparison of Total Slack and SPI

Slack	SPI	Condition
>0	>1	Ahead of schedule
<0	<1	Behind Schedule
<0	>1	Critical path activities are behind schedule but total project is ahead
>0	<1	Critical Path activities are ahead of schedule but the total project is behind

Total Project Cost Distribution



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